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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/447,023 Filing Date: November 22, 1999 Appellant(s): BERRY ET AL.

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GROUP 1700

John J. Gagel For Appellant

SUPPLEMENTAL

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed 9-11-03.

# (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

## (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

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#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Invention

The summary of invention contained in the brief is correct.

### (6) Issues

The appellant's statement of the issues in the brief is correct.

## (7) Grouping of Claims

Appellant's brief includes a statement that claims 70, 85, 86, 88-97, 99-109 do stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

## (9) Prior Art of Record

Chiriboga et al. Ion Exchange purified Anthocyanin Pigments as a Colorant for Cranberry Juic e Cocktail, Journal of Food Science, Chicago, Illinois, 1972, pages 464-467.

# (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 70, 85, 86, 88-97, 99 -109 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No basis is seen for the phrase "wherein the juice component derived from cranberries having said anthocyanin content is the sole component from cranberries in the blend". The claims have been amended to require that "the juice component derived from cranberries having said anthocyanin content is the sole component from cranberries in the blend". However, no particular disclosure is seen to support this amendment, and it is not seen that this limitation was in the specification at the time of the invention.

There is basis for the phrase 'the blended juice has a citric acid content contributed substantially solely by the cranberries" (page 11, lines 5). The problem with using this phrase is that it is not known what is meant by "substantially solely".

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 70, 85, 86, 88-97, 99-109 rejected under 35 U.S.C. 103(a) as being unpatentable over Chiriboga et al. (J. of Food Science).

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Chiriboga et al. disclose a cranberry food product that contains a juice component from cranberries with an anthocyanin content of about 10 mg/100 ml or less (col. 1, 1st para. and Table 1, which show an initial anthocyanin contents below 10 mg and page 465 2<sup>nd</sup> col. for blended juices such as dark juice and light juice). Claims 70 and 85 differ from the reference in the use of other juice components. However, the reference discloses a cocktail mixture, which is sugar- water (page 465, 1st col., 1st para. last line. The cranberry juice itself contains citric acid (applicants' specification, page 10, Table 2). Claim 70 further requires that the juice component derived from cranberries having the anthocyanin content is the sole component from cranberries in the blend. However, Chiriboga et al. disclose a cranberry juice cocktail component, which has 5, 10, 30 and 60% light juice (Table 1). Nothing is seen in the specification that excludes the use of other juices or pigments as in Chiriboga et al. The specification discloses various blends and juice from cranberries, but does not say that other materials such as pigments cannot be added (page 3, lines 35-38, page 4, lines 1-3, page 7, lines 1-28). On page 12, lines 1-10, of the specification formula A is cited as using only light color cranberry juice as the sole source of acid only. The discussion in the specification is to the amount of acid in the berries, using red cranberries and light color cranberries. Table 3 on page 11 is not disclosed as containing light color cranberry juice as the only source of anthocyanins, but as "the sole source of acid to achieve a titratable acidity content. One can see that Formula A is to light color Cranberry juice, and has no other color components in it. However, this does not mean that the formula is closed to other ingredients, because it is cited to show amounts of

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acidity and makes no claim as to being the complete beverage. At the time the invention was made, the specification does not require that the anthocyanin content come only from a cranberry juice component. It is seen that it would have been within the skill of the ordinary worker to use only one color of juice if only one color was required or a blend and as in Chiriboga et al. who use a pale juice and other colored juices. In fact the juice of applicants' specification is from "light color cranberries (page 10, lines 14 and 15). Chiriboga et al. also use juices from cranberries as a component of juice from cranberries (entire reference). Even though Chiriboga et al. do use a pigment to achieve a final juice, light juices are still disclosed as components with the claimed anthocyanin level and therefore they are known (Table 1). Here again, it would have been within the skill of the ordinary worker to not use a pigment, if one was not required as disclosed in column 1, which states that "a portion of the annual crop of cranberries tends to be pale in color, producing a light colored cocktail which is not as appealing as full colored cocktail. Therefore, it would have been obvious to make a blended juice as disclosed by the reference and to use only pale colored berries as the sole source of anthocyanin.

Claim 86 further requires an anthocyanin content of 3.5 mg/100 ml or less.

However, as various levels of anthocyanin are known in light color berries, it would have been obvious to use even lighter colored berries for their known absence of color.

Claim 88 requires that the juice component is a particular amount of the blended juice. Chiriboga et al. disclose using various amounts including 30% light juice and within 10mg/100 ml anthocyanin content as in claim 89 (page 465 (2<sup>nd</sup> col., lines, 1-14).

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Therefore, it would have been obvious to use known amounts of a juice component and anthocyanin content to make a juice.

Claim 90 further requires a particular light absorbance. It is not seen at this time that the cited juices do not show the claimed light absorbance. Therefore, it would have been obvious to make a juice with the cited light absorbance.

Claims 91-94 further require adding known components to juice such as water.

Chiriboga discloses the addition of water and sugar as in claims 91 and 93, 94, other juices added to one juice is extremely well known as in blending orange juice and pineapple juice, apple with raspberry as in claim 92, even the pigment of Chiriboga could be seen to be another juice component, and nothing new is seen in this.

Therefore, it would have been obvious to add known juice components to make a juice.

Claims 95 and 96 further require the addition of added acid. However, the cranberries already contain acid (table 2, page 10, specification). Nothing new is seen in adding more of a natural ingredient in a composition for its known function of providing tartness. In Appellants' Backround of the invention, it is disclosed that acids such as citric are commonly added to cranberry juice to create a more palatable product (page 1, lines 15-21). Certainly, in dilute solutions, natural ingredients would become more dilute, and may need more of that ingredient to improve the taste. Therefore, it would have been obvious to add claimed ingredients which are inherent and also to add acid and other ingredients as shown in Appellants' Background disclosure to make the claimed juice.

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The limitations of claims 97-106 have been discussed above and are obvious for those reasons. Claim 107 requires that the blended juice has a color determined substantially by the cranberry juice component. Since Chiriboga et al. disclose color solely from cranberry juice as in Table 1, columns 1 and 2, then the above rejection encompasses color, which is substantially from the cranberry juice component.

Therefore, it would have been obvious to use a source of anthocyanin content found only in cranberry juice.

Claims 108 and 109 further require lower levels than above of anthocyanin content in the blended juice. If the level of anthocyanin content depends on the degree of ripeness of the cranberry, it would have been within the skill of the ordinary worker to use cranberries with a particular amount of anthocyanin content development, (specification, page 1, lines 22-26) especially knowing that sugar and water can be added to the product as in Chiriboga and appellants' specification, page 1, lines 15-23) to improve the taste of the product. Chiriboga also discloses pale juices that have been blended to achieve even the claimed anthocyanin contents. If one wanted a very pale juice with the claimed anthocyanin content, one would only need to use an unblended pale juice. Therefore, it would have been obvious to use juices with various anthocyanin contents.

# (11) Response to Argument

Appellants' arguments filed 9-11-03 have been fully considered but they are not persuasive. Appellants argue that Chiriboga's objective is to meet a red color standard for CJC by mixing juices using pale berries with high color grade berry juice and then

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adding anthocyanin extract to make up any color deficiency. Applicants further argue that it is known to mix lower color grade berries with higher color grade berries to meet a red color standard and to provide a juice that is red which teaches away from appellants' invention, of making a blended juice with a juice component from cranberries with an anthocyanin content of about 10 mg/100mg.

Appellants argue that the rejection is incorrect as to Table 1, which was said to contain a juice component with anthocyanin content within the claimed range. That this is incorrect, in that Table 1 provides the anthocyanin content of experimental batches of CJC, and not the anthocyanin content of the juice component as an ingredient. That the experimental CJC's were made by blending press juices from dark and pale cranberries and adding crude anthocyanin powder, but that the anthocyanin content of the various juices is not reported. Appellants discuss the Declaration of Harold Mantius, which determines that the anthocyanin content of the light press juice is not reported and cannot be calculated from the data presented. Even so, it is not seen how it can be overlooked that in Table 1 samples of cranberry juice cocktail are given with the % of light juice in each sample. In column two, various amounts of initial anthocyanin contents of the juices are given within the claimed range of 10 mg/100 ml. Also, on page 465, 2<sup>nd</sup> column, 1<sup>st</sup> incomplete paragraph, the juice cocktail is said to be a mixture of dark and light juices. Granted that crude pigment is added to make a final anthocyanin content to make a red product. However, this does not exclude the fact that the "experimental batch of cranberry juice cocktail each contain water and sweetener or acid (acid being inherent to cranberries) and light juices and that before

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the pigment is added that the product is within the claimed anthocyanin range. Even using only part light juices produces a juice, which is under the claimed range, so certainly even paler juices are known. Also, in column 1 of page 465, 1st paragraph, the reference discloses that "cranberry juice was extracted from 400 lb of dark and pale cranberries to produce correspondingly dark and pale juices. In addition, Table 1, column 1 and 2, discloses that is known to make a pale juice cranberry cocktail using only cranberries as the sole component of color in the juice. In the initial juice even though it is a blend it is the sole component from cranberry juice with an anthocyanin content about that which is claimed. Given that clear drinks have been very popular for some time, as in ginger ales, SEVEN UP ™, SPRITE ™, apple juice, white wines, it is seen that it would have been a matter of choice as to whether to make a light color cranberry juice or not because pale cranberry juices were known. As cited in the first column on page 464, "A portion of the annual crop of cranberries tends to be pale in color, producing a light color cocktail which is not as appealing as full color cocktail". Certainly, this article was written before the public acceptance of clear beverages, and now as above the public is accepting of clear beverages.

Appellants argue that Chiriboga does not suggest that is is desirable to make a light color juice from cranberries. Even though the product of Chiriboga is not to a light color juice, the reference discloses that juice from pale color cranberries with a low anthocyanin content was known and the only difference in making it highly red was required to add a pigment.

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Appellants argue that there is no motivation shown by the reference to make the claimed juice, which is only known by hindsight. However, as above pale juices are known and it is a matter of joice whether to color them or not especially given the popularity of clear beverages.

The Mantius declaration is noted, however, as above, the reference does disclose the anthocyanin content of the combined juices, which is very low, which makes the added pale juice have a low anthocyanin content which must be near the claimed amount.

Appellants argue as to the rejection under 112 first paragraph in that the specification should literally state each limitation. However, the Examiner did not exactly make this statement. "No basis at the time the invention was made" was found for the phrase in question. The prosecution of the invention has changed since the application of the Chiraboga reference. Where the tables were said to show citric acid levels, they are now being used to show anthocyanin levels in charts which only show about 4 ingredients, and were not originally used to show anthocyanin sources (Tables 2 and 3. Appellants argue that the use of low anthocyanin cranberry juice as the sole cranberry component (or in the absence of other cranberry components) is conveyed throughout appellants' specification and one way of finding basis is through advances with regard to utilizing low anthocyanin content cranberries instead of conventional red berries. However, one wonders if the idea is conveyed throughout the specification, why it is not explicitly stated. Even though, Appellants' examples do show no other added ingredients, however, the claims are not closed to other added ingredients.

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Phrases such as "and with less need to add citric acid or citric acid containing juices such as lemon juice to modify flavor" only requires <u>less need</u> not a "sole component from cranberry juice that has an anthocyanin content of a certain amount. In addition, as the reference to Chiriboga et al., states, the pigment which is added is a natural cranberry component (col. 1, 1<sup>st</sup> para.). The statement starting with "The berries at the select phrase" means just that, that they can have a particular anthocyanin level.

As to the phrase "pure cranberry juice", no definition is given for such as juice.

Even a juice containing blends of cranberry juice would have been pure and the claims are not to a pure juice.

Appellants argue as to Table 3 that it shows a specific example of a blended juice beverage in which the low anthocyanin cranberry juice is the sole component from cranberries in the blend. However, this table was used to show a 16% light color cranberry juice as the sole source of acid to achieve a titratable acidity content of about 0.49% (underlining added).

As to the dependent claims appellants argue that Chiriboga does not disclose the juice anthocyanin contents as claimed. However, it is seen that it would have been within the skill of the ordinary worker to use further particular amounts of anthocyanin as in claims 85 and 86, and particular amounts of juice from cranberries as in claims 88 and 89. Nothing has been shown that the light absorbance as in claim 90 has not been shown in the use of the pale cranberry juice or as in claim 91 the addition of water. Certainly, if Chiriboga uses only a cranberry juice cocktail, it has water in it, as cocktail type products are known to have added water, instead of being only a juice product

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(page 465, col. 1, par. 1, last line). The further added ingredients as in claims 93-102 require added citric acid or citrus juice, sucrose and water, these are known components of juice cocktail mixtures, and nothing new is seen in the addition of such (Background, para. 1). The particular amounts of juice components as in claim 103 are seen to have been shown by Chiriboga in using 30% light juice as in the rejection of claim 88. Light absorbance as in claim 104 has been discussed above. Claims 105 and 106 have been discussed above as in claim 70 which requires "about 10 mg. and claim 86 which requires 3.5 discussed in the art rejection as is claim 106. Certainly Chiriboga discloses a blended juice as in claim 107 as in claim 88 discussed above. Claims 108 and 109 were rejected along the same lines as other claims containing particular amounts of anthocyanin and Chiriboga et al. disclose that pale juices are known and show an anthocyanin content of less than 10% (Table 1).

For the above reasons, it is believed that the rejections should be sustained.

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1700

HELEN PRATT PRIMARY EXAMINER

Respectfully submitted,

December 16, 2004

Conferees

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